

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

Claim 1. (Previously Presented) A multi flip chip module comprising:

one leadframe having one die pad with upper and lower surfaces and a plurality of outer leads surrounding the die pad;

an integrated circuit mounted on the upper surface of the die pad and having contact areas for receiving bond wires;

bond wires extending from the contact areas on the integrated circuit to the outer leads of the leadframe;

one or more power mosfet semiconductor devices flip chip mounted on the lower surface of the leadframe; and

a molded resin encapsulating the integrated circuit and leaving exposed at least one surface of the power mosfet semiconductor devices.

Claim 2. (Previously presented) The multichip module of claim 1 wherein the mosfets have source bump contacts extending from the surfaces of the mosfets to the die pad and one or more gate bump contacts for each mosfet extending to a corresponding outer lead.

Claim 3. (Previously presented) The multichip module of claim 1 wherein the lead frame has leadless contacts comprising ball contacts extending from the outer leads for establishing an electrical connection to the contact areas of the integrated circuit via the bond wires and for providing surface mounts for connecting the semiconductor device to a surface of an electrical component board.

Claim 4. (Original) The multichip module of claim 1 wherein exposed surface(s) of the power mosfets are surface mountable on an electrical component board.

Claim 5. (Previously presented) A multichip module having one lead frame with one central die pad and peripheral outer leads, an integrated circuit on one side of the die pad, wire bonds for connecting the integrated circuit to outer leads, one or more mosfets having their respective source and gate bumps connected to the other side of the central die pad, said central die pad patterned to provide connections to the outer leads from the source and gate bump connections.

Claim 6. (Original) The multichip module of claim 5 wherein the integrated circuit is encapsulated in an insulating resin.

Claim 7 – 8. Cancelled.

Claim 9. (Previously presented) A multi flip chip module comprising:
a leadframe having a die pad with upper and lower surfaces and a plurality of leads surrounding the die pad;
an integrated circuit mounted on the upper surface of the die pad and having contact areas for receiving connections to the outer leads;
a first type of electrical and mechanical connection for connecting terminals of the integrated circuit to the outer leads of the leadframe;
one or more power mosfet semiconductor devices mounted on the lower surface of the leadframe; and
a second type of electrical and mechanical connection, different from the first type, for connecting the power mosfet(s) to the leadframe; and
a molded resin encapsulating the integrated circuit and leaving exposed at least one surface of the power mosfet semiconductor devices.

Claim 10. (Previously presented) The multi flip chip module of claim 9 wherein the second type of electrical connection is a bond wire connection.

Claim 11. (Previously presented) The multi flip chip module of claim 9 wherein the second type of electrical connection is a ball array or stud array connection.

Claim 12. (Previously presented) A multi flip chip module comprising:
a leadframe having a die pad with upper and lower surfaces and a plurality of outer leads surrounding the die pad;
an integrated circuit mounted on the upper surface of the die pad and having contact areas for receiving connections to the outer leads;
wire bonds connecting contact areas of the integrated circuit to the leads of the leadframe;
one or more power mosfet semiconductor devices mounted on the lower surface of the leadframe; and
an electrical and mechanical connection different from wire bonds for connecting the power mosfet(s) to the leadframe; and
a molded resin encapsulating the integrated circuit and leaving exposed at least one surface of the power mosfet semiconductor devices.

Claim 13. (Currently Amended) The multi flip chip ~~package~~module of claim 12 wherein the electrical and mechanical connection different from wire bonds for connecting the power mosfet(s) to the leadframe comprises a ball grid array or a stud grid array.

Claim 14. (Previously presented) A multi flip chip module comprising:
a leadframe having a die pad with upper and lower surfaces and a plurality of outer leads surrounding the die pad;
an integrated circuit mounted on the upper surface of the die pad and having contact areas for receiving connections to the outer leads;

an electrical and mechanical connection different from ball grid or stud grid array for connecting contact areas of the integrated circuit to the leads of the leadframe;

one or more power mosfet semiconductor devices mounted on the lower surface of the leadframe; and

ball grid or stud grid arrays for connecting the power mosfet(s) to the leadframe; and

a molded resin encapsulating the integrated circuit and leaving exposed at least one surface of the power mosfet semiconductor devices.

Claim 15. (Currently Amended) The multi flip chip ~~package~~module of claim [[12]]14 wherein the electrical and mechanical connection different from ball grid array or stud grid array is a wire bond connection.